PATENT REEXAMINATION BOARD OF THE PATENT OFFICE OF THE STATE INTELLECTUAL PROPERTY OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Address:No.6 Xi Tucheng Lu, Jimeng Qiao Haidian District, Beijing Post code: 100088 P.O.BOX:Beijing 8020

Patent No	02820095.0	Date of Dispatch
Title	COMMUNICATION APPARATUS,COMMUNICATION DEVICE,SUBSTRATE MOUNTING METHOD,AND TOUCH SENSOR	March 18, 2010
Applicant	CELLCROSS CORPORATION	
Agent		

NOTICE ON REEXAMINATION

Applicant:

The Patent Reexamination Board has already begun the examination on the request for reexamination in respect of the above mentioned Application for patent.

Please make your observations within **one month** from the date of receipt of this notice; where no response is made at the expiration of said date, the request for reexamination shall be deemed not to have been made based on the provision of Item 1, Rule 62 of the Implementing Regulations of the Patent Law.

When responding to this Notice on Reexamination, amendments may be made to the application documents for patent. However, the amendments shall only be limited to the deficiencies as pointed out in this Notice. The amended application documents shall be submitted in duplicate.

For the specific contents, please refer to the text of the notice.

Attachment: Text of Decision, 4 page(s)

Collegiate Panel Head Chief Examiner Participating Examiner

P124

NOTIFICATION OF REEXAMINATION

The substantive examination department of the State Intellectual Property Office rejected the present invention patent application on March 6, 2009, on the ground that the present application does not meet the requirement of Article 33 of the Patent Law. In response to the request for reexamination of the applicant CELLCROSS CORP [JP] (called as the petitioner in the following contents), a panel has been established by the Patent Reexamination Board to examine the present case. The office action is now provided as follows:

(1) The text for examination

The petitioner submitted complete document replacement pages of the claims. After examination, the text meets the requirements of Item 1, Rule 61 of the Implementing Regulations of the Patent Law. The present notice is based on Description abstract, Abstract figures, pages 1-37 of Description, and pages 1-30 of Description figures submitted on April 6, 2005 and claims 1-7 submitted on June 9, 2009.

(2) Specific office actions

(a) About Article 33 of the Patent Law

Claims 1 and 2 contain "communication elements which will transmit signals have functions: acknowledging voltage changes between a first conductive layer and a second conductive layer as signals by controlling the voltage between the first and second conductive layers, wherein the signals would be widely transmitted; and transmitting the signals to other communication elements", and "communication elements which will transmit signals have capacitors and have functions: monitoring signals from other communication elements and acknowledging voltage changes of the capacitors as a signal". The above contents are neither contained in the initial description and claims, nor can be directly or unambiguously determined from the initial description and claims and reference figures. Therefore, the amendments go beyond the scope of disclosure contained in the initial description and claims, not complying with the provision of Article 33 of the Patent Law. The specific reasons are as follows:

The initial description (referring to page 10, lines 11-13) disclosed "each communication element has a capacitor. Capacitors of the neighboring communication elements placed within the coverage voltage store the discharged charges. The neighboring communication elements acknowledge a signal on the basis of voltage changes of the capacitors." The initial description (referring to page 10, lines 18-27) disclosed "to charge the drive capacitor 34b, a switch 32a is opened and the switch 32b is closed. The communication device discharges the charge of the drive capacitor 34b to the communication layer 36, thereby realizing successive transmissions." The initial description (referring to page 11, lines 18-20) discloses "this communication device performs a switching operation by which the communication element 200 is brought into a conduction state, causing signal transmission by the resulting voltage drop of the signal layers 20 and 30. Thus, the communication device can be referred to as the "current-diffusion-type" communication device." The initial description (referring to page 13, lines 16-23) discloses "a main capacitor 34 stores electric charges necessary to drive the entire communication element 200. The communication layer 36 schematically represents the first signal layer 20 and the second signal layer 30 (see Fig. 8). This communication element 200 allows a switch 32 to be switched to vary the impedance between electrodes which are connected to the layer 20 and 30, respectively, thereby transmitting a signal. The switch 32 is opened or closed at the predetermined timing by the processing unit 60 (see Fig. 4). This scheme of the communication element can also drive a charge-storage-type communication device." Besides, Figs. 3-9 disclosed that the communication elements drive the capacitor and switches, thereby transmitting a signal. Thus, the amended technical features, "communication elements which will transmit signals have functions: acknowledging voltage changes between a first conductive layer and a second conductive layer as signals by controlling the voltage between the first and second conductive layers, wherein the signals would be widely transmitted; and transmitting the signals to other communication elements", is neither contained in the initial description and claims, nor can be directly or unambiguously

determined from the initial description and claims and reference figures.

The initial description (referring to page 10, lines 10-17) disclosed "each communication element has a capacitor. Capacitors of the neighboring communication elements placed within the coverage voltage store the discharged charges. The neighboring communication elements acknowledge a signal on the basis of voltage changes of the capacitors." The technical feature, "acknowledge a signal on the basis of voltage changes of the capacitors", does not mean "acknowledging voltage changes of the capacitors as a signal". Thus, the amended technical feature, "communication elements which will transmit a signal have a capacitor and have functions: monitoring signals from other communication elements and acknowledging voltage changes of the capacitors as a signal", is neither contained in the initial description and claims, nor can be directly or unambiguously determined from the initial description and claim.

Furthermore, "the signals would be widely transmitted" is neither contained in the initial description and claims, nor can be directly or unambiguously determined from the initial description and claim. The initial description (referring to page 2, lines 1-3) disclosed "preferably, in this communication apparatus, each communication element has a finite setting of communication service area (coverage), so that a signal is conveyed only to the communication elements within the coverage. Furthermore, it is preferable that the coverage is set according to the communication element density of the communication apparatus or the throughput of signal communications." The initial description (referring to page 2, lines 17-22) disclosed "Preferably, the Mth order communication element manages the (M-1)th order communication elements which are populated within a predetermined range therefrom. The predetermined range may be set according to either the distance therefrom or the number of communication elements that relay a signal." The initial description (referring to page 14, lines 6-21) disclosed "in this embodiment, the algorithm of the relay communication scheme has a "theoretical wave propagation mode" and an "address relay transfer mode." The theoretical wave propagation mode is a communication algorithm for a transmitting source

communication element to broadcast a signal to all communication elements, while the address relay transfer mode is a communication algorithm for defining a route to convey a signal along the route from a transmitting source communication element to a destination communication element", "Fig. 11 is an explanatory view illustrating a signal propagating in the theoretical wave propagation mode through a communication apparatus. In the figure, small circles indicate communication elements, the blackened circle at the center indicates a communication element that transmits a signal. The concentric circles surrounding communication elements indicate the areas of the communication elements that receive the signal." .The initial description (referring to page 15, lines 4-6) disclosed "in the relay communication apparatus, all the communication elements are provided with such a coverage setting that allows a local communication with other neighboring communication elements. When the communication elements are distributed to be spaced about 10cm from one another, the coverage of the communication elements is also set at about 10cm."

(b) About Item 4, Article 26 of the Patent Law

Claims 1 and 2 is not based on the Description, not complying with the provision of Item 4, Article 26 of the Patent Law. The reasons are as follows: said claims disclose a generic concept "communication device" which generalizes a broader scope of protection. The description only discloses a communication apparatus having a plurality of distributed communication elements. The communication apparatus is characterized in that each of the communication elements has such a coverage that allows local communications with other neighboring communication elements. The local communications allow sequential transmissions of a signal between the communication elements, thereby conveying the signal to a target communication element. According to contents contained in the present application documents, those skilled in the art cannot predict the other ways generalized by the above generic concept except the way disclosed in the present application description, can solve its technical problem, i.e., individual conductive wires are not necessarily

formed between the communication elements for transmitting signals. Therefore, claims 1-2 are not based on Description, and thus do not comply with the provision of Item 4, Article 26 of the Patent Law. The applicant shall add the technical features of claim 5 into claims 1-2.

The petitioner shall make a reply within one-month time limit from receiving the present Notice. If the petitioner cannot provide persuasive reasons to prove the present application complies with the Patent Law and the Implementing Regulations of the Patent Law, or the amended documents do not still comply with the related provisions of the Patent Law and the Implementing Regulations of the Patent Law, the panel would make a reexamination decision of upholding the decision of rejection. If the petitioner fails to respond within the time limit, the request for reexamination shall be deemed withdrawn.

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上海桂平路435号
上海专利商标事务所有限公司
张鑫

发文日：

2010年03月18日

申请号或专利号：02820095.0 发文序号：2010031500313750

案件编号： 1F25558

发明创造名称： 通信装置、通信设备、电路板安装方法和触觉传感器

复审请求人： 芯维高科技有限公司

复 审 通 知 书

复审请求人：

专利复审委员会对上述专利申请的复审请求已经开始审理。

请在收到本通知书之日起1个月内陈述意见；期满未答复的，根据专利法实施细则第63条第1款的规定，该复审请求视为撤回。

在对专利复审委员会的复审通知书作出答复时，可以修改专利申请文件，修改应当符合专利法第33条、专利法实施细则第61条的规定及审查指南第4部分第2章第4.2节有关修改文本的审查的规定。修改的申请文件应当提交一式两份。

对专利复审委员会发出的复审通知书，复审请求人应当在收到该通知书之日起1个月内针对通知书指出的缺陷进行书面答复；期满未进行书面答复的，其复审请求视为撤回。复审请求人提交无具体答复内容的意见陈述书的，视为对复审通知书中的审查意见无反对意见。

通知的具体内容请见正文。

附：通知书正文 4 页。

注：陈述意见时请注明案件编号及专利申请号。

上海专利商标事务所有限
2010.3.22
收文

合议组组长：高栋 主审员：郭琼 参审员：杨静

国家知识产权局专利复审委员会
专利复审无效
审查业务章

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纸件申请，回函请寄：100088 北京市海淀区蓟门桥西土城路6号 国家知识产权局专利复审委员会。
电子申请，应当通过电子专利申请系统以电子文件形式提交相关文件。除另有规定外，以纸件等其他形式提交的文件视为未提交。

中华人民共和国国家知识产权局

复审通知书正文

国家知识产权局实质审查部门以本发明专利申请不符合专利法第33条的规定为由于2009年3月6日驳回了本发明专利申请。应申请人芯维高科技有限公司（下称请求人）于2009年6月9日提出的复审请求，专利复审委员会成立合议组对本案进行审理，现提出如下审查意见：

（1） 审查文本的认定

请求人在提交复审请求时提交了权利要求书全文替换页，经审查合议组未发现不符合专利法实施细则第61条第1款规定之处，因此本复审通知书是以请求人于2005年4月6日提交的说明书摘要、摘要附图、说明书第1-37页、说明书附图第1-30页和2009年6月9日提交的权利要求第1-7项为基础进行审理的。

（2） 具体审查意见

（a）关于专利法第33条

权利要求1和2中记载的“想要发送信号的通信元件具有通过控制上述第1导电层和上述第2导电层之间的电压，而将其向周围广泛传播的上述第1导电层和上述第2导电层之间的电压变动作为信号，发送给其它通信元件的功能”以及“想要接收信号的通信元件具有电容器，并具有监视来自其他通信元件的信号，将上述电容器的电压变动识别为信号的功能”既非原说明书和权利要求书文字记载的内容，也非能够根据原说明书和权利要求书文字记载的内容以及说明书附图直接地、毫无疑义地确定的内容，因此修改超出了原说明书和权利要求书记载的范围，这样的修改是不允许的，不符合专利法第33条的规定。具体分析如下：

上述权利要求中记载了“想要发送信号的通信元件具有通过控制上述第1导电层和上述第2导电层之间的电压，而将其向周围广泛传播的上述第1导电层和上述第2导电层之间的电压变动作为信号，发送给其它通信元件的功能”，而在原说明书第10页第11—13行记载了“各通信元件具有电容器，在有效通信距离内配置的周边通信元件的电容器中储存释放的电荷。周边的通信元件根据该电容器的电压变化识别信号”，原说明书第10页第18—27行中记载了“驱动用电容器34b放电时，开关32a闭合，开关32b断开。此通信设备通过使驱动用电容器34b的电荷对通信层36放电，发送信号”，原说明书第11页第18—20行中记载了“此通信设备利用开关动作使通信元件200导通，并利用其压降发送信号，因而也可将该通信设备称为“电流扩散型”通信设备”，原说明书第13页第16—23行中记载了“主电容器34储存驱动整个通信元件200所需的电荷。通信层36以图解示意状表示第1信号层20和第2信号层30(参考图8)。此通信元件200利用开关32的开关动作，使电极之间的阻抗变化，以发送信号。由处理部60(参考图4)按规定的定时使开关32通断。也可用此方式驱动电荷储存型通信设备”，同时参看附图3—9中记载的都是通信元件通过驱动电容器和开关来发送信号。可见，所述修改后的技术特征“想要发送信号的通信元件具有通过控制上述第1导电层和上述第2导电层之间的电压，而将其向周围广泛传播的上述第1导电层和上述第2导电层之间的电压变动作为信号，发送给其它通信元件的功能”既未记载

在原说明书和权利要求书中，也不能根据原说明书和权利要求书文字记载的内容以及说明书附图直接地、毫无疑义地确定。

上述权利要求中记载了“想要接收信号的通信元件具有电容器，并具有监视来自其他通信元件的信号，将上述电容器的电压变动识别为信号的功能”，而原说明书第10页第10—17行中相关记载为“各通信元件具有电容器，在有效通信距离内配置的周边通信元件的电容器中储存释放的电荷。周边的通信元件根据该电容器的电压变化识别信号”，原申请文件中“根据电容器的电压变化识别信号”的含义并非是“将电容器的电压变动识别为信号。可见，所述修改后的技术特征“想要接收信号的通信元件具有电容器，并具有监视来自其他通信元件的信号，将上述电容器的电压变动识别为信号的功能”既未记载在原说明书和权利要求书中，也不能根据原说明书和权利要求书文字记载的内容以及说明书附图直接地、毫无疑义地确定。

此外，权利要求1、2中“向周围广泛传播的”在原说明书和权利要求书中没有记载，也不能根据原说明书和权利要求书文字记载的内容以及说明书附图能直接地、毫无疑义地确定，原说明书第2页第1—3行记载了“最好将各通信元件的通信距离设定成有限，仅对该通信距离内存在的通信元件传递信号。而且，最好根据通信装置中的通信元件密度或信号传递的吞吐量设定此通信距离”，原说明书第2页第17—22行记载了“最好第M级通信元件管辖配置在离开本身规定范围内的第(M-1)级通信元件。这里，规定范围可以是离开本身的距离，或根据对信号进行中继的通信元件个数设定”，原说明书第2页第17—20行记载了“最好第M级通信元件管辖配置在离开本身规定范围内的第(M-1)级通信元件。这里，规定范围可以是离开本身的距离，或根据对信号进行中继的通信元件个数设定”，原说明书第14页第6—21行记载了“本实施方式中，链接传递型的通信算法存在“逻辑波动传播模式”和“地址链接传递模式”。逻辑波动传播模式是从发送源的通信元件对全部通信元件广播信号的通信算法，地址链接传递模式是决定路由后，从发送源的通信元件将信号沿路由传到作为目的地的通信元件的通信算法”、“图11用于说明通信装置中利用逻辑波动传播模式传播信号的状态。该图中，小圆表示通信元件，中央涂黑的圆表示作为信号发送源的通信元件。包围通信元件的同心圆表示接收信号的通信元件的区域”，原说明书15页第4—6行记载了“链接传递型通信装置中，全部通信元件将其有效通信距离设定成能与配置在周边的其它通信元件进行局部通信的程度。将通信元件分散配置成元件间隔大致为10cm时，通信元件的有效通信距离也被设定成10cm左右”。

（b）专利法第26条第4款

权利要求1、2没有以说明书为依据，不符合专利法第26条第4款的规定。具体分析如下：上述权利要求中使用的上位概念“通信装置”概括了一个较宽的保护范围，但在说明书中仅给出了具有分散配置的多个通信元件，其中将各通信元件的通信距离设定成能与配置在其周边的其它通信元件进行局部通信的程度，并且通过利用此局部通信在通信元件之间依次传递信号，使信号传递到作为目的的通信元件。依据本申请文件所记载的内容，所属技术领域的技术人员难于预见该上位概念所概括的除本申请说明书所述方式之外的所有方式均

能解决其技术问题，即无须单独布线来实现信号传递。因此上述权利要求没有以说明书为依据，不符合专利法第26条第4款的规定，请求人应当将权利要求5中的技术特征加入到权利要求1、2中。

复审请求人应在收到本通知之日起一个月内作出答复。如果复审请求人不能在上述期限内提出本申请符合专利法及其实施细则规定的充分理由，或者所提交的修改文件仍不符合专利法及其实施细则的相关规定，合议组将作出维持驳回决定的复审决定。逾期不答复，该复审请求将被视为撤回。